

# Apparatus and Method for Constructing a Multi-Channel Output Signal or for Generating a Downmix Signal

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## Abstract

The apparatus for constructing a multi-channel output signal using an input signal and parametric side information, the input signal including the first input channel and the  
10 second input channel derived from an original multi-channel signal, and the parametric side information describing interrelations between channels of the multi-channel original signal uses base channels for synthesizing first and second  
15 output channels on one side of an assumed listener position, which are different from each other. The base channels are different from each other because of a coherence measure. Coherence between the base channels (for example the left and the left surround reconstructed channel) is reduced by calculating a base channel for one of those  
20 channels by a combination of the input channels, the combination being determined by the coherence measure. Thus, a high subjective quality of the reconstruction can be obtained because of an approximated original front/back coherence.

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